controller that can disconnect the entire winch electric installation from all sources of potential. The switch must be in series with and on the supply side of the main line emergency switch.

(c) Each davit arm limit switch, whether connected in the power circuit or in the control circuit, must disconnect all ungrounded conductors of the circuit controlled.

(d) If one motor is used with two winches, there must be a main line emergency switch, a clutch interlock switch, and a master switch for each winch, except that a single main line emergency switch located as required by paragraph (e) of this section may be used for both winches. The main line emergency switches must be connected, in series, ahead of the motor controller. The master switches must be connected in parallel and each, in series, with the corresponding clutch interlock switch for that winch. Each clutch interlock switch must open the circuit to its master switch, except when the power unit is clutched to the associated winch. There must be a means to prevent the power unit from being clutched to both winches simultaneously.

(e) The main line emergency disconnect switch must be adjacent to the master switch, within reach of the winch operator, accessible to the person in charge of the boat stowage, and for gravity davit installations, in a position from which the movement of boat davit arms can be observed as they approach the final stowed position.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28283, June 4, 1996]

Subpart 111.97—Electric Power-Operated Watertight Door Systems

§ 111.97–1 Applicability.

This subpart applies to electric power-operated watertight door systems required under Subpart H of Part 170 of this chapter.

[CGD 79–023, 48 FR 51008, Nov. 4, 1983]

§ 111.97–3 General requirements.

Each watertight door operating system must meet Subpart § 163.001 of this chapter.

§ 111.97–5 Electric and hydraulic power supply.

(a) Each electric motor-driven door operating system must have the same source of power as the emergency lighting and power system.

(b) The temporary emergency power source and the final emergency power source must each be capable of operating all doors simultaneously or sequentially as allowed by § 163.001–5(b) of this chapter.

(c) The power supply for each hydraulically operated watertight door system that uses a hydraulic system common to more than one watertight door must be an accumulator tank with enough capacity to open all doors once and to close all doors two times and be supplied by one or more motor-driven hydraulic pumps that can operate from the final source of the emergency lighting and power system.

(d) The motor-driven hydraulic pumps must automatically maintain the accumulator tank pressure within the design limits, be above the uppermost continuous deck, and be controlled from above the uppermost continuous deck.

(e) The accumulator tank capacity required in paragraph (c) of this section must be available when the accumulator tank pressure is at the automatic pump ''cut-in'' pressure.

(f) The source of power for each hydraulically operated watertight door system using an independent hydraulic system for each door operator must meet paragraphs (a) and (b) of this section.

(g) The power supply for other types of watertight door operators must be accepted by the Commandant.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28283, June 4, 1996]

§ 111.97–7 Distribution.

(a) Each distribution panelboard for a watertight door system must be above

the uppermost continuous deck and must have means for locking.

(b) Each feeder supplying a watertight door operating system must be above the uppermost continuous deck.

(c) Each watertight door operating system must have a separate branch circuit.

§111.97–9 Overcurrent protection.

Overcurrent devices must be arranged to isolate a fault with as little disruption of the system as possible. The relationship between the load and the rating or setting of overcurrent devices must meet the following:

(a) The rating or setting of each feeder overcurrent device must be not less than 200 percent of its maximum load.

(b) The rating or setting of a branch circuit overcurrent device must be not more than 25 percent of that of the feeder overcurrent device.

Subpart 111.99—Fire Door Holding and Release Systems

§111.99–1 Applicability.

This subpart applies to fire door holding and release systems, if fitted.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28284, June 4, 1996]

§111.99–3 Definitions.

As used in this subpart—

Central control panel means a manually-operated device on the navigating bridge or in the fire control room for releasing one or more fire doors.

Fire door means a door that is in a fire boundary, such as a stairway enclosure or main vertical zone bulkhead, that is not usually kept closed.

Fire door holding magnet means an electronmagnet for holding a fire door open.

Local control panel means a manually-operated device next to a fire door for releasing the door so that the fire door self-closing mechanism may close the door.

[CGD 94–108, 61 FR 28284, June 4, 1996; 61 FR 33045, June 26, 1996]

§111.99–5 General.

Fire door release systems, if installed, must meet SOLAS 74, regulation II–2/30.4.3.

[CGD 94–108, 61 FR 28284, June 4, 1996]

Subpart 111.101—Submersible Motor-Driven Bilge Pumps

§111.101–1 Applicability.

This subpart applies to each submersible motor-driven bilge pump required on certain vessels under §56.50–55(a)(2)(i) of this chapter.

§111.101–3 General requirements.

(a) Each electric motor driving a submersible bilge pump must be in an open end air bell of rugged construction and be of a size that does not allow water to enter the motor if the compartment that the motor is in is flooded to the uppermost continuous deck.

(b) The motor, if of the open type, must be protected from splashing water from the bottom.

(c) The cable to each motor must enter through the open bottom of the air bell.

(d) Each motor must be able to operate continuously at rated load under any condition, dry or with water in the air bell at any level up to the maximum allowed under paragraph (a) of this section.

(e) Each motor controller must be above the uppermost continuous deck. There must be a master switch at the controller and a master switch at the motor. The master switch at the motor must be disconnected from the circuit when the motor is started or stopped from the master switch at the controller.

(f) Each motor must be energized from the final emergency power source.

Subpart 111.103—Remote Stopping Systems

§111.103–1 Power ventilation systems except machinery space ventilation systems.

Each power ventilation system must have:

(a) A control to stop the ventilation that is:

(1) Outside the space ventilated; and